

jc882 U.S. PTO
01/02/03

FIG. 1A

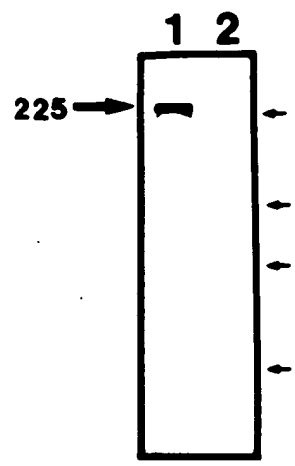


FIG. 1B

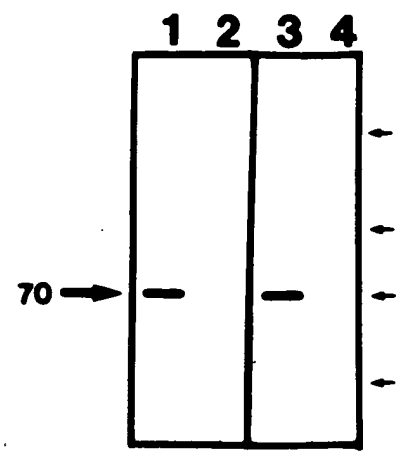


FIG. 2A

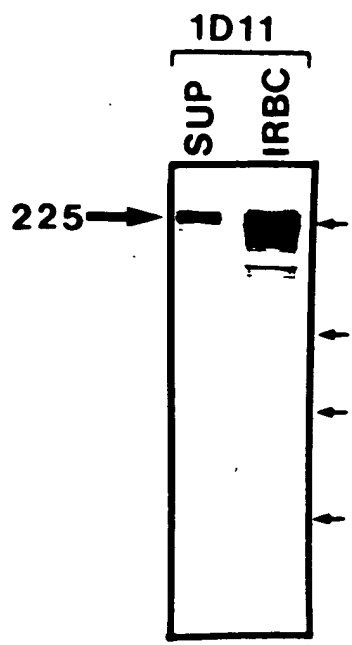
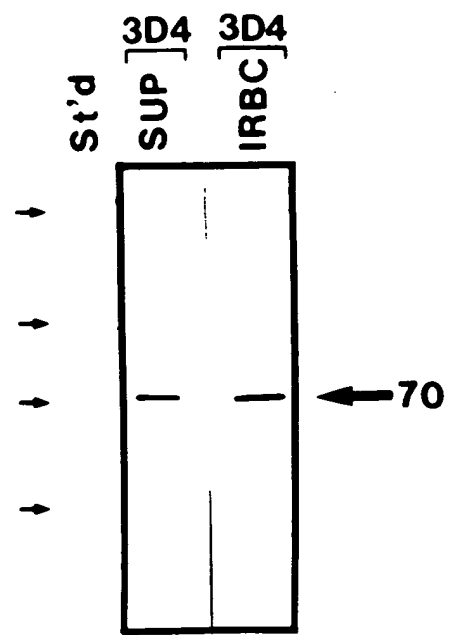


FIG. 2B



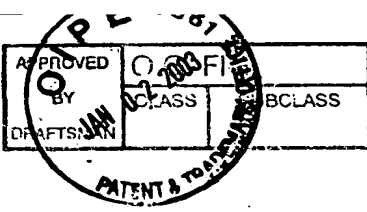


FIG. 3A

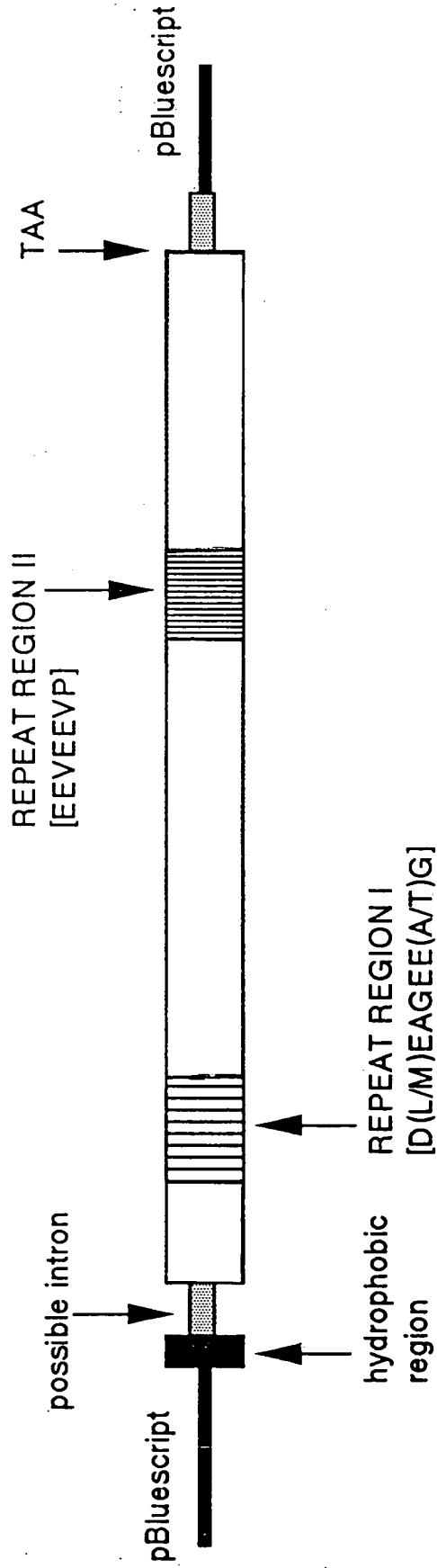
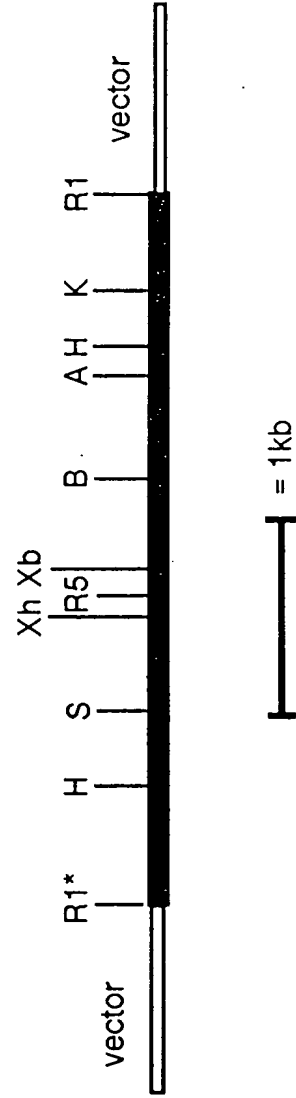


FIG. 3B



RECEIVED
JAN 08 2003
JOHN CENTER 1600126

11/02/03



82 U.S. PTO

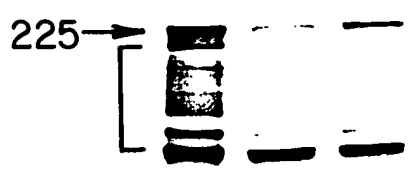
FIG. 4A

1 2 3 4 5 6 7



FIG. 4B

1 2 3 4 5



1 2 3 4 5 6 7 8 9 10 11

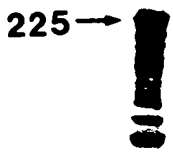


FIG. 4C

1 2 3 4 5 6 7

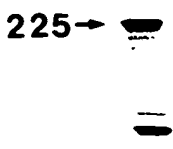
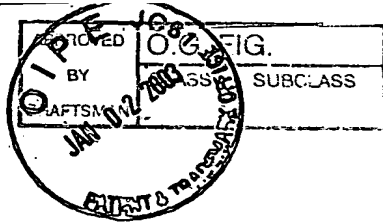


FIG. 4D



RECEIVED

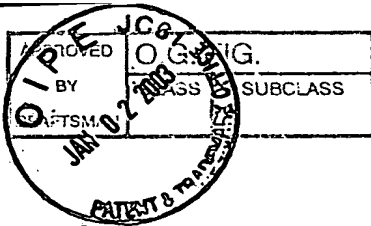
JAN 08 2003

TECH CENTER 1600/2900

FIG. 5A

G

AATTCGGTAAAGTAACAACTATGGTTTCGTATCTATATATAACCTTACTAATTTTATCT 61
N S G K V T T M V S Y L Y I T L L I L S
TTTGCTTTTCTTTTAATTCATGCTTCAACAGTAAGATAAAAATAATCTATAAAAACCTGC 120
F A F L L I H A S T
TATATATACATATATATTCATAAGTGGCATTGTGAATTGCGATCATTTAAATTTACGTA 180
AAAACAATATTGAAAAAATTTTTTTTTTTTTTTTTTTTTTTTGTTCACAGAACGATTTAG 240
N D L
AATTGGAAAATGCTTCTGATGATGTTGTAGAGGTGGAGGATCCTTCAAACGACGGTTTAG 300
E L E N A S D D V V E V E D P S N D G L
AATTAGAAGAGGAAAATTTTGATGAGAATTCAGGTGATGATGAAACTCTTTTAGATGCTA 360
E L E E E N F D E N S G D D E T L L D A
CCCCCGAAGATGACTTTGCCTTAACAGATTTGCCAATTGAAGACGATGAGGAAGTCAACG 420
T P E D D F A L T D L P I E D D E V N
AAACGTTAGATGGAGGTGAATCATTAGGAGAGGTTTCCACTGAAGATATGGAACAGAAAG 480
E T L D G G E S L G E V S T E D M E T E
ATGGCTCAACAGATGATACGGAAACAGAAGAAGGACTACCTGGTGATATGGAAGGAGAAG 540
D G S T D D T E T E E G L P G D M E G E
AAGAAGCTGGCGATATGGAAGCAGGGGAAGAAGCTGGTGATTGGAAGCAGGGGAAGAAA 600
E E A G D M E A G E E A G D L E A G E E
CTGGCGATTGGAAGCAGGGGAAGAACTGGCGATTGGAAGCAGGGGAAGAAGCTGGTG 660
T G D L E A G E E T G D L E A G E E A G
ATTTGGAAGCAGGGGAAGAACTGGCGATTGGAAGCAGGGGAAGAACTGGAGATGCGG 720
D L E A G E E T G D L E A G E E T G D A
AAACTGAAGAAGGAGCAACTGGAGATGCGGAAACTGAAAATGGAGCAACTGTGTATGTAG 780
E T E E G A T G D A E T E N G A T V Y V
ACACAGAAGATAGTTTCAGCTGATGGAGCAGAAAAAGTACATGTTCTGCTCAAGAAAATG 840
D T E D S S A D G A E K V H V P A Q E N
TACAACCTGCCGATAGTAATGATGCCCTCTTTGGAAGTATTTTGATAAAGATATAATTT 900
V Q P A D S N D A L F G S I L D K D I I
TTGATCATATTAAAGATTTTCGAGCCACTATTCGAACAAATTGTGGCGGGTACTGCTAAAC 960
F D H I K D F E P L F E Q I V A G T A K
ATGTTACGGGACAAGAATTGCCAATGAAACCTGTACCATTACCAGTGGCAGAAGAGCCCG 1020
H V T G Q E L P M K P V P L P V A E E P
CGCAAGTACCAGCGGAAGAATTAGATGCCACTCCAGAGGATGACTTCGCATTAGATGTTA 1080
A Q V P A E E L D A T P E D D F A L D V
CAGAATCTCCCGAGGAAGTAGAATTAGTATTAGATGAAGAGGCAACTGAAGAAGAATCAA 1140
T E S P E E V E L V L D E E A T E E E S
CGGAAGTGGGACCAACGGAAGAAGGACCAACCGAAGAATTAGATGCCACTCCAGAGGATG 1200
T E V G P T E E G P T E E L D A T P E D
GATTTGCGATTAGACGAACTGCAGAAGGAGAAACAGAAGAAACGTAGAGGGAGAAGAAA 1260
G F R I R R N C R R R N R R N V E G E E
CAGAAGAAGCTGCAGAAGGAGAAGTATCAGAAGAACTCCAGAAGGAGAAGAAGAGTTAG 1320
T E E A A E G E V S E E T P E G E E E L
AGGCAACTCCAGAGGATGATTTTCGCATTAGATGGAACCTACATTAGAAGAAACCGAAGAAA 1380
E A T P E D D F A L D G T T L E E T E E
CTGCAGAAGGAGAAGAAACCGTAGAGGGAGAAGAAACCGTAGAGGGAGAAGAAACCGTAG 1440
T A E G E E T V E G E E T V E G E E T V
AGGGAGAAGAAGCTGCAGAAGGAGAAGAAGAGTTAGAGGCAACTCCAGAGGATGACTTCC 1500
E G E E A A E G E E E L E A T P E D D F
AATTAGAAGAACCATCAGGAGAAGGAGAAGGGGAAGGAGAAGGGGAAGGAGAAG 1560
Q L E E P S G E G E G E G E G E G E



RECEIVED
JAN 08 2003
1600/2900

FIG. 5B

A _____ A

GAGAAGCGTTAGTAGCAGTGCCAGTAGTGGCCGAACCGGTAGAAGTAGTGACTCCTGCTC 1620
G E A L V A V P V V A E P V E V V T P A
AGCCTGTCAAACCAATGGTCGCTCCAACGGCAGATGAACTTTATTTCGTTGATATCTTAG 1680
Q P V K P M V A P T A D E T L F V D I L
ATAACGATTTAACGTATGCAGACATTACATCCTTTGAGCCATTATTTAAACAAATCCTCA 1740
D N D L T Y A D I T S F E P L F K Q I L
AGGATCCTGATGCAGGAGAGGCTGTAACAGTACCATCAAAGGAAGCACCTGTACAAGTAC 1800
D D P D A G E A V T V P S K E A P V Q V
CAGTGGCAGTAGGGCCCCGCGCAAGAAGTGCCAACGGAAGAATTGATGCAACTCCAAGAGG 1860
P V A V G P A Q E V P T E E L M Q L Q E
ACGATTTCAATTAGAAGGAAGTGCAGAAGCTCCAGAGGAAGGAGAATTAGTATTAGAAG 1920
D D F E L E G T A E A P E E G E L V L E
GAGAAGGAGAACCAACGGAAGAAGAGCCAAGAGAAGGAGAGCCAACAGAAGGAGAAGTGC 1980
G E G E P T E E E P R E G E P T E G E V
CAGAAGAAGAATTAGAGGCAACTCCAGAGGACGATTTCAATTAGAAGAACCAACAGGAG 2040
P E E E L E A T P E D D F E L E E P T G
AAGAAGTAGAAGAAACCGTAGAGGGCGAAGAACTGCAGAAGGAGAAGAAGTGGAAGAGG 2100
E E V E E T V E G E E T A E G E E V E E
TACCTGCAGAAGTAGAAGAAGTGGAAGAGGTACCTGCAGAAGTAGAAGAAGTGGAAGAGG 2160
V P A E V E E V E E V P A E V E E V E E
TACCAGAAGAAGTAGAAGAGGTACCCGCAGAAGTAGAAGAAGTGGAAGAGGTACCAGAAG 2220
V P E E V E E V P A E V E E V E E V P E
AAGTGGAAGAGGTACCAGAAGAAGTGGAAGAGGTACCAGAAGAAGTGGAAGAGGTACCAG 2280
E V E E V P E E V E E V P E E V E E V P
AAGAAGTGGAAGAAGTGGAAGAAGTAGAAGAAGTAGAGGTACCAGCGGTAGTAGAAGTAG 2340
E E V E E V E E V E E V E V P A V V E V
AAGTACCAGCGGTAGTAGAAGAAGAGGTGCCAGAAGAAGTAGAAGAAGAAGAAGAGG 2400
E V P A V V E E E V P E E V E E E E E
AAGAACCAGTAGAGGAAGAAGATGTATTACAATTAGTAATACCATCGGAAGAAGATATAC 2460
E E P V E E E D V L Q L V I P S E E D I
AATTAGACAAACCAAAGAAAGACGAATTAGGCTCTGGAATTTTATCTATCATCGACATGC 2520
Q L D K P K K D E L G S G I L S I I D M
ACTACCAAGACGTTCCAAAGGAATTTATGGAAGAAGAAGAAGAACTGCAGTGTATCCAT 2580
H Y Q D V P K E F M E E E E E T A V Y P
TGAAACCAGAAGATTTTGCAAAGGAAGATTCACAATCTACAGAATGGCTCACATTCATTC 2640
L K P E D F A K E D S Q S T E W L T F I
AAGGCCTAGAAGGCGACTGGGAACGATTAGAAGTGAGCTTAAATAAGGCTAGAGAAAGAT 2700
Q G L E G D W E R L E V S L N K A R E R
GGATGGAACAAAGAAATAAAGAATGGGCTGGCTGGCTTCGCTTAATTGAAAATAAATGGT 2760
W M E Q R N K E W A G W L R L I E N K W
CAGAATATAGTCAAATTTCAACAAAAGGAAAGGACCCAGCTGGTTTGAGAAAACGAGAGT 2820
S E Y S Q I S T K G K D P A G L R K R E
GGAGCGACGAGAAATGGA AAAAATGGTTTAAAGCAGAAGTCAAATCCCAAATTGATTCAC 2880
W S D E K W K K W F K A E V K S Q I D S
ACTTGAAAAAATGGATGAACGACACTCATTCCAATTTATTTAAATTCCTTGTGAAAGATA 2940
H L K K W M N D T H S N L F K I L V K D

B _____ B

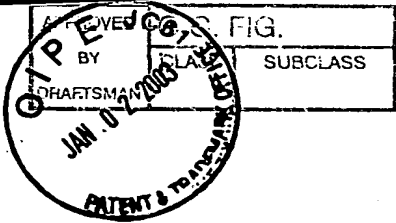


FIG. 5C

B ————— B

TGTCACAATTTGAAAACAAGAAAACCAAAGAATGGTTAATGAATCACTGGAAAAAGAACG 3000
M S Q F E N K K T K E W L M N H W K K N
AACGGGGTTATGGTTCTGAATCATTTGAAGTTATGACCACATCAAATTATTAAATGTGG 3060
E R G Y G S E S F E V M T T S K L L N V
CTAAGAGTCGAGAATGGTACCGTGCCAATCCTAATATAAATAGAGAAAGAAGAGAACTCA 3120
A K S R E W Y R A N P N I N R E R R E L
TGAAATGGTTTCTCCTAAAAGAAAACGAATATTTAGGACAAAGAATGGAAAAAATGGACT 3180
M K W F L L K E N E Y L G Q R M E K M D
CATTGGAAAAAAGTTAAATTTTTTGTGTTCAATTCAATGTGTACAACATTTTCTGGAAAA 3240
S L E K S
CGCCTAACCAAGGAAGAATGGAATCAATTTGTTAATGAAATAAAAGTTTGAATTATAGAA 3300
AAAAGAACAGATTATTCTCTTATAAAATAAATAATTC 3337

RECEIVED
JAN 08 2003
TECH CENTER 1600/2900

FIG. 6A



FIG. 6B



U.S. PTO

102/03

FIG. 7A

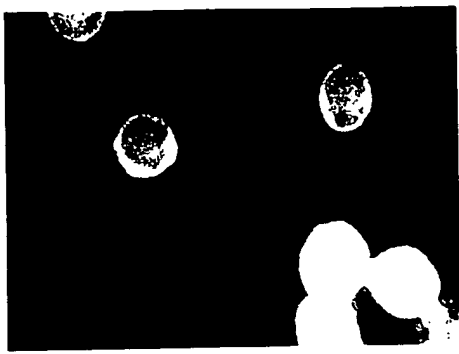


FIG. 7B

